

REMARKS***Summary of the Amendment***

Upon entry of the *Listing of Claims*, claims 16, 18, 22, and 23 will have been amended and claims 17 and 28 will have been canceled without prejudice or disclaimer. Accordingly, claims 16, 18 – 27, and 29 – 40 will remain pending.

Summary of the Official Action

In the instant Office Action, the Examiner has rejected claim 23 based upon a formal matter and has rejected claims 16 – 40 over the art of record. By the present amendment and remarks, Applicants submit that the rejections have been overcome, and respectfully request reconsideration of the outstanding Office Action and allowance of the present application.

Rejection Under 35 U.S.C. § 112, Second Paragraph, is Moot

By the present amendment, Applicants have amended claim 23 to address the formal matters raised by the Examiner in the pending Office Action. In particular, claim 23 has been amended to depend from claim 21 and to recite that the method further comprises prepressurizing the container at least one of before and after the flushing with nitrogen.

Accordingly, Applicants request that the Examiner reconsider and withdraw the formal rejection of claim 23 under 35 U.S.C. § 112, second paragraph, and indicate that this claim, and all other pending claims, is fully in compliance with the requirements of the statute.

Traversal of Rejection Under 35 U.S.C. § 102(b)***I. Over Bedin***

Applicants traverse the rejection of claims 16 – 18 and 29 under 35 U.S.C. § 102(b) as being anticipated by BEDIN et al. (U.S. Patent No. 5,720,148) [hereinafter “BEDIN”]. The Examiner asserts that BEDIN shows all of the recited features of the above-noted claims, *see*,

e.g., col. 5, lines 10 – 32; and col. 7, lines 25 – 45. Applicants traverse the Examiner's assertions.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See *The Manual of Patent Examining Procedure* [hereinafter "MPEP"] § 2131. Applicants submit that the applied art does not show each and every element of the claimed invention.

Applicants' independent claim 16, as currently amended, includes subject matter from original claims 17 and 28. Accordingly, independent claim 16 now recites, *inter alia*, *enriching the liquid* with at least one of oxygen and an oxygen/gas mixture, filling one or more containers with the gas enriched liquid, and sealing the containers pressure-tight, wherein *the gas enriched liquid is kept under the nitrogen atmosphere for at least part of the time after the liquid gas is enriched*. Applicants submit that BEDIN fails to show each of the above-noted features of at least independent claim 16.

While BEDIN discloses pressuring a vat 70 of liquid with nitrogen, Applicants note that the Examiner has not identified any subject matter in BEDIN that expressly or impliedly discloses enriching the liquid with oxygen or oxygen/gas or discloses that the gas enriched liquid is kept under nitrogen atmosphere for at least part of the time after the liquid gas is enriched, as recited in at least independent claim 16, as now amended. In fact, BEDIN expressly describes that the liquid, a fruit drink composed of water, a fruit, sugar concentrate and possibly preserving agents, is propelled by a pump 24 and is routed by an air separator 12 to lower the oxygen rate. See BEDIN, col. 4, ll. 44 – 51. Thus, in contrast to the pending claims, which recite enriching

the liquid with at least one of oxygen and an oxygen/gas mixture, BEDIN seeks to remove oxygen for more efficient pumping of the liquid through the system.

As BEDIN fails to provide any express or implied disclosure of enriching the liquid with oxygen or oxygen/gas, and, in fact, seeks to reduce oxygen in the system, since this oxygen is detrimental to his pressurization system, Applicants submit this documents cannot support the Examiner's assertions of anticipation under 35 U.S.C. § 102(b). Further, as BEDIN fails to provide any express or implied disclosure of a gas enriched liquid, this document certainly cannot be reasonably construed as disclosing the gas enriched liquid is kept under nitrogen atmosphere for at least part of the time after the liquid gas is enriched. Thus, Applicants submit BEDIN fails to disclose the subject matter alleged in the pending rejection of at least independent claim 16.

Because the applied art fails to disclose each recited element of Applicants' claims, Applicants submit that BEDIN cannot establish an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(b).

Further, Applicants submit that claims 17, 18 and 29 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that BEDIN fails to anticipate the embodiments of the invention recited in claims 17, 18 and 29.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 16 – 18 and 29 under 35 U.S.C. § 102(b) and indicate that these claims are allowable in the next official communication to the undersigned.

2. Over Maheen

Applicants traverse the rejection of claims 16, 17, and 29 under 35 U.S.C. § 102(b) as being anticipated by MEHEEN (U.S. Patent No. 6, 457,495). The Examiner asserts that MEHEEN shows all of the recited features of the above-noted claims, *see, e.g.*, col. 14, lines 58 – 60; and col. 13, lines 40 – 43. Applicants traverse the Examiner's assertions.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). *See The Manual of Patent Examining Procedure* [hereinafter "MPEP"] § 2131. Applicants submit that the applied art does not show each and every element of the claimed invention.

As discussed above, Applicants' independent claim 16, as currently amended, includes subject matter from original claims 17 and 28. Accordingly, independent claim 16 now recites, *inter alia*, *enriching the liquid* with at least one of oxygen and an oxygen/gas mixture, filling one or more containers with the gas enriched liquid, and sealing the containers pressure-tight, *wherein the gas enriched liquid is kept under the nitrogen atmosphere for at least part of the time after the liquid gas is enriched*. Applicants submit that BEDIN fails to show each of the above-noted features of at least independent claim 16.

Applicants note that, while MEHEEN discloses filling the bottle with nitrogen prior to filling, the liquid later filling the bottle is either a carbonated beverage (soda or beer), which includes dissolved gas, such as carbon dioxide, or a non-carbonated beverages (milk-based products, juice, wine. *See, e.g.*, MEHEEN, col. 1, ll. 11 – 16. In either case, Applicants note that MEHEEN fails to disclose a liquid enriched with at least one of oxygen and an oxygen/gas mixture, as recited in the pending claims. In fact, MEHEEN discloses that atmospheric gases,

“and oxygen in particular,” within the bottle after the bottle is sealed can facilitate rapid degradation of liquid products. MEHEEN, col. 1, ll. 17 – 22.

Thus, as MEHEEN seeks to prevent contacting the liquid beverage with atmospheric gases, *see, e.g.*, MEHEEN, col. 1, ll. 32 – 37, Applicants submit that this document cannot even arguably be understood to disclose enriching a liquid with at least one of oxygen and an oxygen/gas mixture, as recited in at least amended independent claim 16. In view of MEHEEN’s express teaching that contact between the liquid and atmospheric gases, in particular, oxygen should be prevented, Applicants submit this documents cannot support the Examiner’s assertions of anticipation under 35 U.S.C. § 102(b). Further, as MEHEEN fails to provide any express or implied disclosure of a liquid enriched with at least one of oxygen and an oxygen/gas mixture, Applicants submit that this document certainly cannot be reasonably construed as disclosing the enriched liquid is kept under nitrogen atmosphere for at least part of the time after the liquid gas is enriched. Thus, Applicants submit MEHEEN fails to disclose the subject matter alleged in the pending rejection of at least independent claim 16.

Because the applied art fails to disclose each recited element of Applicants’ claims, Applicants submit that MEHEEN cannot establish an adequate evidentiary basis to support a rejection of anticipation under 35 U.S.C. § 102(b).

Further, Applicants submit that claims 17 and 29 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that MEHEEN fails to anticipate the embodiments of the invention recited in claims 17 and 29.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 16, 17, and 29 under 35 U.S.C. § 102(b) and indicate that these claims are allowable in the next official communication to the undersigned.

Traversal of Rejection Under 35 U.S.C. § 103(a)

1. Over Meheen

Applicants traverse the Examiner's rejection of the rejection of claim 19 under 35 U.S.C. § 103(a) as being unpatentable over MEHEEN. While acknowledging MEHEEN fails to disclose the recited pressure range of the nitrogen atmosphere, the Examiner asserts it would have been obvious to modify MEHEEN to utilize the recited pressure range according to the claim by optimizing the range through routine skill in the art. Applicants traverse the Examiner's assertions.

With regard to the pending rejection of the claims under 35 U.S.C. § 103(a), Applicants note the Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not produce a *prima facie* case, Applicants are under no obligation to submit evidence of non-obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met:

- (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
- (2) there must be a reasonable expectation of success; and
- (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP §2142.

Further, while rejecting a *rigid* application of the teaching, suggestion, or motivation (“TSM”) test in an obviousness inquiry, the U.S. Supreme Court acknowledged the importance of identifying “a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does” in an obviousness determination. *Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1356-1357 (Fed. Cir. 2007) (quoting *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1731 (2007)).

As noted above, because MEHEEN expressly discloses for reasons including that oxygen within the sealed bottle facilitates rapid degradation of the contained liquid that contact between the liquid and atmospheric gases, in particular, oxygen should be prevented, Applicants submit this documents expressly teaches against the embodiments of the invention recited in at least independent claim 16, i.e., enriching a liquid with at least one of oxygen and an oxygen/gas mixture, filling one or more containers with the gas enriched liquid, and sealing the containers pressure tight.

As MEHEEN expressly teaches that trapping oxygen inside the bottle should be prevented to preserve the quality of the liquid, Applicants submit that it would not have been obvious to one ordinarily skilled in the art to modify MEHEEN to enrich the liquid with at least one of oxygen and an oxygen/gas mixture, as recited in at least amended claim 16. Further, as MEHEEN describes only adverse consequences to having oxygen contact the liquid and/or trapped in the bottle, one ordinarily skilled in the art would not have a reasonable expectation of

success in modifying MEHEEN in any manner that would render the embodiments of instant invention obvious under 35 U.S.C. § 103(a).

Further, because MEHEEN fails to disclose or suggest enriching a liquid with at least one of oxygen and an oxygen/gas mixture, filling one or more containers with the gas enriched liquid, as recited in at least independent claim 16, as currently amended, Applicants submit that no proper modification of MEHEEN can render unpatentable the combination of features recited in at least independent claim 16, such that the pending rejection under 35 U.S.C. § 103(a) is improper and should be withdrawn.

Further, Applicants submit that claim 19 is allowable at least for the reason that this claim depends from an allowable base claim and because it recites additional features that further define the present invention. In particular, Applicants submit that MEHEEN fails to render unpatentable the combination of features recited in claim 19.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claim 19 under 35 U.S.C. § 103(a) and indicate that this claim is allowable in the next official communication to the undersigned.

2. Over Cluesserath in view of Tsukano

Traverse the rejection of claims 16, 17, 20 – 24, 29 – 34, and 38 – 40 under 35 U.S.C. § 103(a) as being unpatentable over CLÜSSERATH et al. (U.S. Patent No. 6,474,368) [hereinafter “CLUESSERATH”] in view of TSUKANO et al. (U.S. Patent No. 6,308,752) [hereinafter “TSUKANO”]. The Examiner asserts that CLUESSERATH discloses a liquid bottling process and apparatus for beer, which the Examiner identifies as a gas enriched liquid, which includes keeping the liquid under an inert atmosphere during the bottling process. Moreover, while acknowledging this document does not disclose a nitrogen atmosphere, the Examiner asserts it

would have been obvious to modify CLUESSERATH to include such an atmosphere in view of TSUKANO's disclosure of using nitrogen as an inert pressurizing gas. Applicants traverse the Examiner's assertions.

With regard to the pending rejection of the claims under 35 U.S.C. § 103(a), Applicants note the Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the Examiner does not produce a *prima facie* case, Applicants are under no obligation to submit evidence of non-obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met:

- (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;
- (2) there must be a reasonable expectation of success; and
- (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP §2142.

Further, while rejecting a *rigid* application of the teaching, suggestion, or motivation ("TSM") test in an obviousness inquiry, the U.S. Supreme Court acknowledged the importance of identifying "a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does" in an obviousness determination. *Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.*, 492 F.3d 1350, 1356-

1357 (Fed. Cir. 2007) (quoting *KSR International Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1731 (2007)).

By way of background, Applicants note that embodiments of the invention are directed to oxygen or oxygen/gas enriched liquids, and more particularly to enriching the liquids with oxygen or oxygen/gas and filling bottles with the enriched liquid. Applicants note that oxygen or oxygen/gas enriched liquids are distinguished from carbonated liquids both in their stability and the manner in which they are handled. By way of non-limiting example, oxygen is more difficult to dissolve in an aqueous liquid than carbon, and it is more difficult to retain the dissolved oxygen in the liquid for a longer time. While Applicants' application discloses a number of documents discussing the known problems involved in enriching, handling, and filling containers with oxygen enriched liquids, the known solutions seek to keep the liquid under high pressure oxygen atmosphere, as this oxygen environment is believed necessary to maintain the oxygen in the liquid.

In contrast to the known solution, the inventors have found that exposing an oxygen enriched liquid to a nitrogen pressure atmosphere not only does not result in an accelerated escape of oxygen, but retains the oxygen in the liquid for a longer time. Further, as nitrogen is less expensive and less dangerous than oxygen, this solution is superior to the known procedure. In accordance with the inventors' discovery, Applicants' independent claim 16, as currently amended, includes subject matter from original claims 17 and 28. Accordingly, independent claim 16 now recites, *inter alia*, *enriching the liquid* with at least one of oxygen and an oxygen/gas mixture, filling one or more containers with the gas enriched liquid, and sealing the containers pressure-tight, wherein *the gas enriched liquid is kept under the nitrogen atmosphere for at least part of the time after the liquid gas is enriched*. Further, Applicants' independent

claim 30, as currently amended, recites, *inter alia*, a vat at least partially filled with a liquid pressured with nitrogen, *said liquid being a gas enriched liquid which is enriched with at least one of oxygen and an oxygen/gas mixture*. Applicants submit that no proper combination of CLUESSERATH in view of TSUKANO can render unpatentable the combination of features recited in at least independent claims 16 and 30.

Applicants note that CLUESSERATH discloses a beer bottling process and apparatus. As is known, beer naturally contains dissolved carbon dioxide arising from the fermentation process. However, neither the known fermenting process nor any express or implied disclosure of CLUESSERATH results in the beer being enriched with at least one of oxygen and an oxygen/gas mixture, as recited in at least independent claim 16 and 30, as now amended.

Further, Applicants note that TSUKANO likewise is directed to a bottle filling device and procedure for filling a bottle or container with a liquid stored in a vessel that is pressurized with carbonate gas. It is also noted that TSUKANO discloses that air is not desired within the liquid storage vessel, "[i]t is to be understood that while the storage tank 4 is pressurized by blowing a genuine carbonate gas thereinto in preparation to a filling operation, an amount of air remains therein to degrade the purity slightly." TSUKANO, col. 3, ll. 51 – 55. Applicants also note the Examiner has not identified any express or implied teaching in TSUKANO of enriching a liquid with at least one of oxygen and an oxygen/gas mixture, as recited in at least independent claim 16 and 30, as now amended.

Because neither document disclose or suggests enriching a liquid with at least one of oxygen and an oxygen/gas mixture, Applicants submit that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 16 and 30, as currently amended.

Moreover, as set forth in the above background discussion, as compared to containing a natural carbon dioxide, an oxygen enriched liquid requires considerable technical effort in order to bring or enrich oxygen into the liquid and to retain the oxygen in the liquid. As concerns directed to stability and enrichment are not necessary in handling/processing beer or other carbonated liquids, neither CLUESSERATH nor TSUKANO address any manner of enriching a liquid with at least one of oxygen and an oxygen/gas mixture and/or handling such an oxygen and/or oxygen/gas mixture enriched liquid in a container filling procedure.

Still further, as TSUKANO states that an amount of air remaining in the liquid vessel pressurized with carbonated gas will degrade the purity of the liquid, Applicants submit there is no apparent disclosure in the applied art for enriching a liquid with at least one of oxygen and an oxygen/gas mixture, and certainly no articulated reasoning for one ordinarily skilled in the art to modify the applied art in any manner that would render the pending claims obvious.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of at least independent claims 16 and 30 and indicate that these claims are allowable over the art of record. Further, Applicants submit that claims 17, 20 - 24, 29, 31 - 34, and 38 - 40 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that CLUESSERATH in view of TSUKANO fails to render unpatentable the combination of features recited in claims 17, 20 - 24, 29, 31 - 34, and 38 - 40.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 17, 20 - 24, 29 - 34, and 38 - 40 under 35 U.S.C. § 103(a) and indicate that this claim is allowable in the next official communication to the undersigned.

3. Over Meheen in view of Quinn

Traverse the rejection of claims 25 – 27 under 35 U.S.C. § 103(a) as being unpatentable over MEHEEN in view of QUINN (U.S. Patent No. 5,131,440). While acknowledging MEHEEN fails to disclose introducing liquid gas into the container prior to filing, the Examiner asserts it would have been obvious to do so in view of the disclosure by QUINN. Applicants traverse the Examiner's assertions.

As set forth above, MEHEEN expressly discloses that, because oxygen within the sealed bottle facilitates rapid degradation of the contained liquid, contact between the liquid and atmospheric gases, in particular, oxygen should be prevented. Thus, it is apparent that MEHEEN expressly teaches against the embodiments of the invention recited in at least independent claim 16, i.e., enriching a liquid with at least one of oxygen and an oxygen/gas mixture, filling one or more containers with the gas enriched liquid, and sealing the containers pressure tight.

Further, while QUINN discloses inserting a cryogenic liquid or liquid gas after the vessel has been filled, not before, this document fails to disclose or suggest enriching a liquid with at least one of oxygen and an oxygen/gas mixture, as recited in at least amended claim 16.

Because neither document disclose or suggests enriching a liquid with at least one of oxygen and an oxygen/gas mixture, Applicants submit that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 16, as currently amended.

Applicants also note that QUINN fails to provide any express or implied teaching to counter the express teaching of MEHEEN to prevent atmospheric gas, in particular oxygen, from contacting the liquid, such that no proper combination of these documents can render unpatentable the invention recited in at least independent claim 16. Thus, Applicants submit that

there is no articulated reasoning in the applied art of record for one ordinarily skilled in the art to modify the applied art in any manner that would render obvious the embodiments of the invention recited in at least independent claim 16.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of at least independent claims 16 and indicate that these claims are allowable over the art of record. Further, Applicants submit that claims 25 – 27 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that MEHEEN in view of QUINN fails to render unpatentable the combination of features recited in claims 25 – 27.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 25 – 27 under 35 U.S.C. § 103(a) and indicate that this claim is allowable in the next official communication to the undersigned.

4. Over Meheen in view of Dekleva

Applicants submit that the rejection of claim 28 under 35 U.S.C. § 103(a) as being unpatentable over MEHEEN in view of DEKLEVA (U.S. Patent Application Publication No. 2003/023114) is moot. While acknowledging MEHEEN fails to disclose liquid enriched with oxygen, the Examiner asserts it would have been obvious to do so in view of the disclosure by DEKLEVA. Applicants traverse the Examiner's assertions.

By the present amendment, claim 28 has been canceled without prejudice or disclaimer. However, as subject matter of claim 28 has been added to independent claim 16, Applicant submits that no proper combination of MEHEEN in view of DEKLEVA can render unpatentable the invention recited in at least amended claim 16. In this regard, MEHEEN expressly discloses

that, because oxygen within the sealed bottle facilitates rapid degradation of the contained liquid, contact between the liquid and atmospheric gases, in particular, oxygen should be prevented. Thus, it is apparent that MEHEEN expressly teaches against the embodiments of the invention recited in at least independent claim 16, i.e., enriching a liquid with at least one of oxygen and an oxygen/gas mixture, filling one or more containers with the gas enriched liquid, and sealing the containers pressure tight.

Further, Applicants note that DEKLEVA likewise fails to disclose or suggest enriching a liquid with at least one of oxygen and an oxygen/gas mixture, as recited in at least amended claim 16.

Because neither document disclose or suggests enriching a liquid with at least one of oxygen and an oxygen/gas mixture, Applicants submit that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 16, as currently amended.

Applicants also note that DEKLEVA fails to provide any express or implied teaching to counter the express teaching of MEHEEN to prevent atmospheric gas, in particular oxygen, from contacting the liquid, such that no proper combination of these documents can render unpatentable the invention recited in at least independent claim 16. Thus, Applicants submit that there is no articulated reasoning in the applied art of record for one ordinarily skilled in the art to modify the applied art in any manner that would render obvious the embodiments of the invention recited in at least independent claim 16.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of at least independent claims 16 and indicate that these claims are allowable over the art of record.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claim 16, which includes subject matter of now canceled claim 28, under 35 U.S.C. § 103(a) and indicate that this claim is allowable in the next official communication to the undersigned.

5. Over Cluesserath in view of Tsukano and further in view of Dekleva

Applicants submit that the rejection of claim 28 under 35 U.S.C. § 103(a) as being unpatentable over CLUESSERATH in view of TSUKANO and further in view of DEKLEVA is moot. While acknowledging CLUESSERATH in view of TSUKANO fails to disclose liquid enriched with oxygen, the Examiner asserts it would have been obvious to do so in view of the disclosure by DEKLEVA. Applicants traverse the Examiner's assertions.

As discussed above, claim 28 has been canceled without prejudice or disclaimer. However, as subject matter of claim 28 has been added to independent claim 16, Applicant submits that no proper combination of CLUESSERATH in view of TSUKANO and further in view of DEKLEVA can render unpatentable the invention recited in at least amended claim 16. In this regard, CLUESSERATH discloses a beer bottling process and apparatus. As discussed above, beer naturally contains dissolved carbon dioxide arising from the fermentation process. However, neither the known fermenting process nor any express or implied disclosure of CLUESSERATH results in the beer being enriched with at least one of oxygen and an oxygen/gas mixture. Thus, it is apparent that CLUESSERATH fails to expressly or impliedly disclose enriching a liquid with at least one of oxygen and an oxygen/gas mixture, as recited in at least independent claim 16.

Further, Applicants note that neither TSUKANO nor DEKLEVA, both discussed above, expressly or impliedly disclose or suggest enriching a liquid with at least one of oxygen and an oxygen/gas mixture, as recited in at least amended claim 16.

Because none of the applied documents disclose or suggest enriching a liquid with at least one of oxygen and an oxygen/gas mixture, Applicants submit that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 16, as currently amended.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of at least independent claims 16 and indicate that these claims are allowable over the art of record.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claim 16, which includes subject matter of now canceled claim 28, under 35 U.S.C. § 103(a) and indicate that this claim is allowable in the next official communication to the undersigned.

6. Over Cluesserath in view of Tsukano and further in view of Berthurum

Traverse the rejection of claims 35 and 36 under 35 U.S.C. § 103(a) as being unpatentable over CLUESSERATH in view of TSUKANO and further in view of BETHURUM (U.S. Patent No. 4,120,425). While acknowledging CLUESSERATH in view of TSUKANO fails to disclose separating the liquid in the vat from the pressurizing gas, the Examiner asserts it would have been obvious to do so in view of the disclosure by BETHURUM. Applicants traverse the Examiner's assertions.

As discussed above, CLUESSERATH discloses a beer bottling process and apparatus. As discussed above, beer naturally contains dissolved carbon dioxide arising from the fermentation process. However, neither the known fermenting process nor any express or implied disclosure of CLUESSERATH results in the beer being enriched with at least one of oxygen and an oxygen/gas mixture. Thus, it is apparent that CLUESSERATH fails to expressly

or impliedly disclose a liquid being a gas enriched liquid which is *enriched with at least one of oxygen and an oxygen/gas mixture*, as recited in at least amended independent claim 30.

While TSUKANO has been discussed above, Applicants submit that BETHURUM is directed to dispensing individual glasses of sparkling wine or champagne without being flat or frothy, but fails to provide any express or implied teaching of a liquid being a gas enriched liquid which is *enriched with at least one of oxygen and an oxygen/gas mixture*, as recited in at least independent claim 30, as currently amended. In view of the foregoing, Applicants note that neither TSUKANO nor BETHURUM, expressly or impliedly disclose or suggest the expressly recited feature of a liquid being a gas enriched liquid which is *enriched with at least one of oxygen and an oxygen/gas mixture*.

Because none of the applied documents disclose or suggest enriching a liquid with at least one of oxygen and an oxygen/gas mixture, Applicants submit that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 30, as currently amended.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of at least independent claim 30 and indicate that this claim is allowable over the art of record. Further, Applicants submit that claims 35 and 36 are allowable at least for the reason that these claims depend from allowable base claims and because these claims recite additional features that further define the present invention. In particular, Applicants submit that CLUESSERATH in view of TSUKANO and further in view of BETHURUM fails to render unpatentable the combination of features recited in claims 35 and 36.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claims 35 and 36 under 35 U.S.C. § 103(a) and indicate that this claim is allowable in the next official communication to the undersigned.

7. Over Cluesserath in view of Tsukano and further in view of Quinn

Traverse the rejection of claim 37 under 35 U.S.C. § 103(a) as being unpatentable over CLUESSERATH in view of TSUKANO and further in view of QUINN (U.S. Patent No. 5,131,440). While acknowledging CLUESSERATH in view of TSUKANO fails to disclose introducing liquid gas into the container prior to filing, the Examiner asserts it would have been obvious to do so in view of the disclosure by QUINN. Applicants traverse the Examiner's assertions.

As set forth above, CLUESSERATH discloses a beer bottling process and apparatus. As is known, beer naturally contains dissolved carbon dioxide arising from the fermentation process. However, neither the known fermenting process nor any express or implied disclosure of CLUESSERATH results in the beer that would be understood as a liquid being a gas enriched liquid which is *enriched with at least one of oxygen and an oxygen/gas mixture*, as recited in at least amended independent claim 30.

Further, as generally discussed above, Applicants submit that neither TSUKANO nor QUINN discloses a liquid being a gas enriched liquid which is *enriched with at least one of oxygen and an oxygen/gas mixture*, as recited in at least amended independent claim 30.

Because none of the applied documents of record disclose or suggest a liquid being a gas enriched liquid which is *enriched with at least one of oxygen and an oxygen/gas mixture*, Applicants submit that no proper combination of these documents can render unpatentable the combination of features recited in at least independent claim 30, as currently amended.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of at least independent claims 30 and indicate that these claims are allowable over the art of record. Further, Applicants submit that claim 37 is allowable at least for the reason that it depends from an allowable base claim and because it recites additional features that further define the present invention. In particular, Applicants submit that CLUESSERATH in view of TSUKANO and further in view of QUINN fails to render unpatentable the combination of features recited in claims 37.

Accordingly, Applicants request that the Examiner reconsider and withdraw the rejection of claim 37 under 35 U.S.C. § 103(a) and indicate that this claim is allowable in the next official communication to the undersigned.

Authorization to Charge Deposit Account

If for any reason a check including the amount for any necessary fees is not associated with this file, the undersigned authorizes the charging of any necessary fees, including any extensions of time fees required to place the application in condition for allowance by Examiner's Amendment, to Deposit Account No. 19 - 0089 in order to maintain pendency of this application.

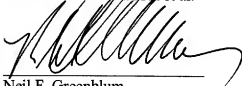
CONCLUSION

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the Applicants' invention, as recited in each of claims 16, 18 - 27, and 29 - 40. The applied reference of record has been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Further, any amendments to the claims which have been made in this response and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Respectfully submitted,
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